

Creating Prototypes in Atal Tinkering Lab(ATL):Class VI to VIII **Group Activity (6 Jan to 14 Feb 2020)**

Watch the presentation of students <https://youtu.be/yKNH2PJ2I30>

Students of classes VI to VIII created & completed different prototypes within 6 weeks from 6th January to 14th February in the ATL periods. These prototypes integrated concepts of STEAM (Science; Technology; Engineering; Art; Maths). Each class-section of middle school was divided into 5 teams; each team consisted of 5-6 students.

Some of the topics taken for the prototypes were as follows:

- Water level indicator
- Rain detector with alarm
- Study table using PVC
- Smart lamp using LDR
- Laser security system
- Electrical boat
- Alcohol detecting engine locking system
- Robotics crane
- Automatic street light using IR/LDR sensor
- Smart irrigation system

The students were given topics and asked to research about the topic online. They were given links on Youtube to gather information about their prototype. Each team selected their team leader. On Google classroom (INV classroom) a Google doc was shared with each team. Students were required to present their report of the project in this doc by listing - project-title, project-materials, project-description, etc. related to their project. This was a team project so each team member was required to fill in the required information. The team-members collectively brought materials required for their prototype and additional material was used from the ATL. For 4 weeks students worked in their respective ATL periods to complete their prototype under the supervision of the ATL trainer and teacher. Charts were made by each team, to explain the created prototype. Presentation/demonstration of the prototype was made by each team to their class and INV teachers.

Students had fun creating the prototypes and they also learnt the value of teamwork and initiative. Watch this video to see the presentations of few teams: <https://youtu.be/yKNH2PJ2I30>

